

**Work Order ID 84075**

Wednesday, May 02, 2012 1:05:58 PM

**\*84075\***

Page 1

Item ID: D3697-041

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Tube Assembly

Start Date: 5/2/2012 Start Qty: 4.00

**\*4\***

Cust Item ID:

Required Date: 5/8/2012 Req'd Qty: 4.00

**\*4\***

Customer:

Reference:

Approvals:

Process Plan:

Date: 12-05-12

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start **\*NR1\***

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3697	Rev B								

130

0.00

**\*130\***

Large Fab

Large Fab

Memo

0.00

Large Fab

1- cut at 72.00" as per dwg D3697

2- form and trim tube as per dwg D3697 using DT90033-deburr

3-weld D3697-3/-4 and D3797-1 on tube D3697-1 as per dwg D3697 using DT9003 welding jig

4-drill holes in tube in 5 pls as per dwg D3697

(4)

Q 12-5-9

140

QC9- Inspect visual per QSI004- Fusion Welds

0.00

**\*140\***

QC

Memo

0.00

Quality Control

H

Q

DE 12-05-09

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 84075

**\*84075\***

Page 2

Wednesday, May 02, 2012 1:05:58 PM

Item ID: D3697-041 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Tube Assembly  
 Start Date: 5/2/2012 Start Qty: 4.00 **\*4\*** Cust Item ID:  
 Required Date: 5/8/2012 Req'd Qty: 4.00 **\*4\*** Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 <b>*150*</b> QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00 0.00		8710707		(4)			
160 <b>*160*</b> HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1  Memo	0.00 0.00				(4)		12.5-10	
170 <b>*170*</b> QC Quality Control	QC3- Inspect Part Finish  Memo	0.00 0.00				(4)			8/12/05/10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**Work Order ID 84075**

Wednesday, May 02, 2012 1:05:58 PM

**\*84075\***

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Item ID: D3697-041

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Tube Assembly

Start Date: 5/2/2012 Start Qty: 4.00

**\*4\***

Cust Item ID:

Required Date: 5/8/2012 Req'd Qty: 4.00

**\*4\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	Identify as per dwg & Stock Location: <b>241A</b>	0.00							
<b>*180*</b>									
Packaging	Memo	0.00							
Packaging									
190	QC21- Final Inspection - Work Order Release	0.00							
<b>*190*</b>									
QC	Memo	0.00							
Quality Control									

ME  
12-05-10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Wednesday, May 02, 2012 1:06:02 PM

Page 1

Work Order ID: 84075

**\*84075\***

Parent Item: D3697-041

**\*D3697-041\***

Parent Item Name: Tube Assembly

Start Date: 5/2/2012

Required Date: 5/8/2012

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:A 08-04-25 new issue DD verified by:EC  
IPP Rev:B 08-07-14 revB as per dwg DD verified by:ec

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3697-3		Manufactured	No			130	Each	9.0000	1	4			
---------	--	--------------	----	--	--	-----	------	--------	---	---	--	--	--

**\*D3697-3\***

Support Plate, LH

\*\*

EL 12-5-8

Location

Loc Qty

Loc Code

WA023

9

50386

3

82741

6

D3697-4		Manufactured	No			130	Each	9.0000	1	4			
---------	--	--------------	----	--	--	-----	------	--------	---	---	--	--	--

**\*D3697-4\***

Support Plate, RH

\*\*

EL 12-5-8

Location

Loc Qty

Loc Code

WA

6

82739

6

WA023

3

59681

3

D3797-1		Manufactured	No			130	Each	12.0000	1	4			
---------	--	--------------	----	--	--	-----	------	---------	---	---	--	--	--

**\*D3797-1\***

Ground Plate

\*\*

EL 12-5-8

Location

Loc Qty

Loc Code

ST241A

12

74313

2

82737

10

4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries



# Picklist Print

Page 2

Wednesday, May 02, 2012 1:06:03 PM

Work Order ID: 84075

\*84075\*

Parent Item: D3697-041

\*D3697-041\*

Parent Item Name: Tube Assembly

Start Date: 5/2/2012

Required Date: 5/8/2012

Start Qty: 4.00

Required Qty: 4.00

M6061T6T0.375W.049

Purchased

No

130

f

48.6000

6

25.26316

**\*M6061T6T0 375W 049\***

\*\*

12-5-8

6061-T6 RD Tube .375 x.049W

Location

Loc Qty

Loc Code

MAT014

48.6

116720

12

119160

36.6

24'

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

SHOP COPY

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UNCONTROLLED COPY

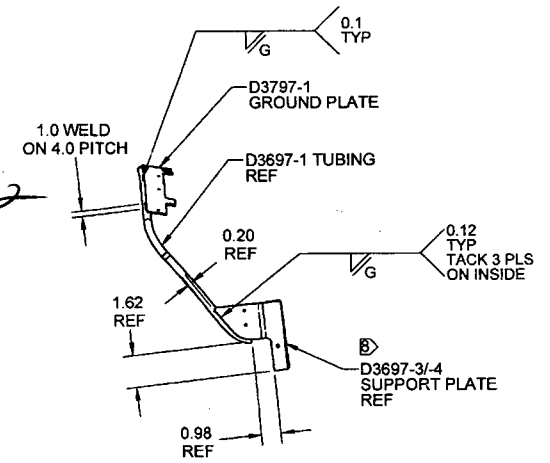
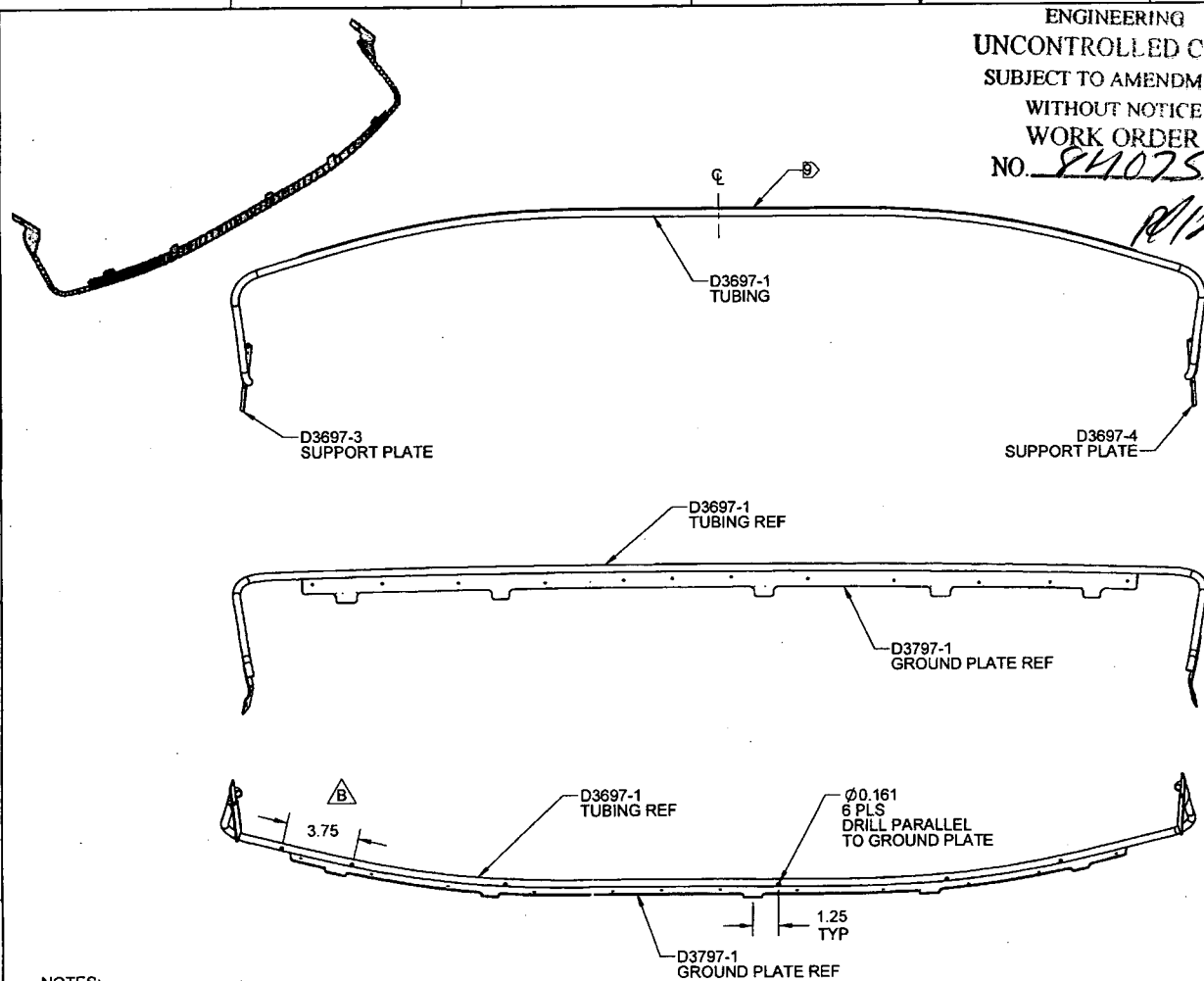
SUBJECT TO AMENDMENT

WITHOUT NOTICE

WORK ORDER

NO. 84075

*R/12-05-2*



RELEASED  
*03-07-08*

PART LIST

QTY	PART NUMBER	DESCRIPTION
-041		
X	D3697-041	TUBE ASSEMBLY
1	D3697-1	TUBING
1	D3697-3	SUPPORT PLATE
1	D3697-4	SUPPORT PLATE
1	D3797-1	GROUND PLATE

B	REMOVE POWDER COAT & MASKED HATCHED AREAS. SHEET 1 ZONE A,8; ADD Ø0.161 HOLE. SHEET 1 ZONE B,7	RF	08.06.02
A	NEW ISSUE	RF	08.05.26
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	D3697	SHEET 1 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	TUBE ASSEMBLY	NTS
DATE	08.06.02	<small>COPYRIGHT © 2008 BY DART AEROSPACE LTD  THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	

NOTES:

- 1) WELD PER QSI 004
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.55 lbs
- 8) LOCATE D3697-3/4 ON D3697-1 USING DT9009 WELDING JIG
- 9) CENTER D3797-1 GROUND PLATE ON D3697-1 TUBING

**D3697-041 TUBE ASSEMBLY**

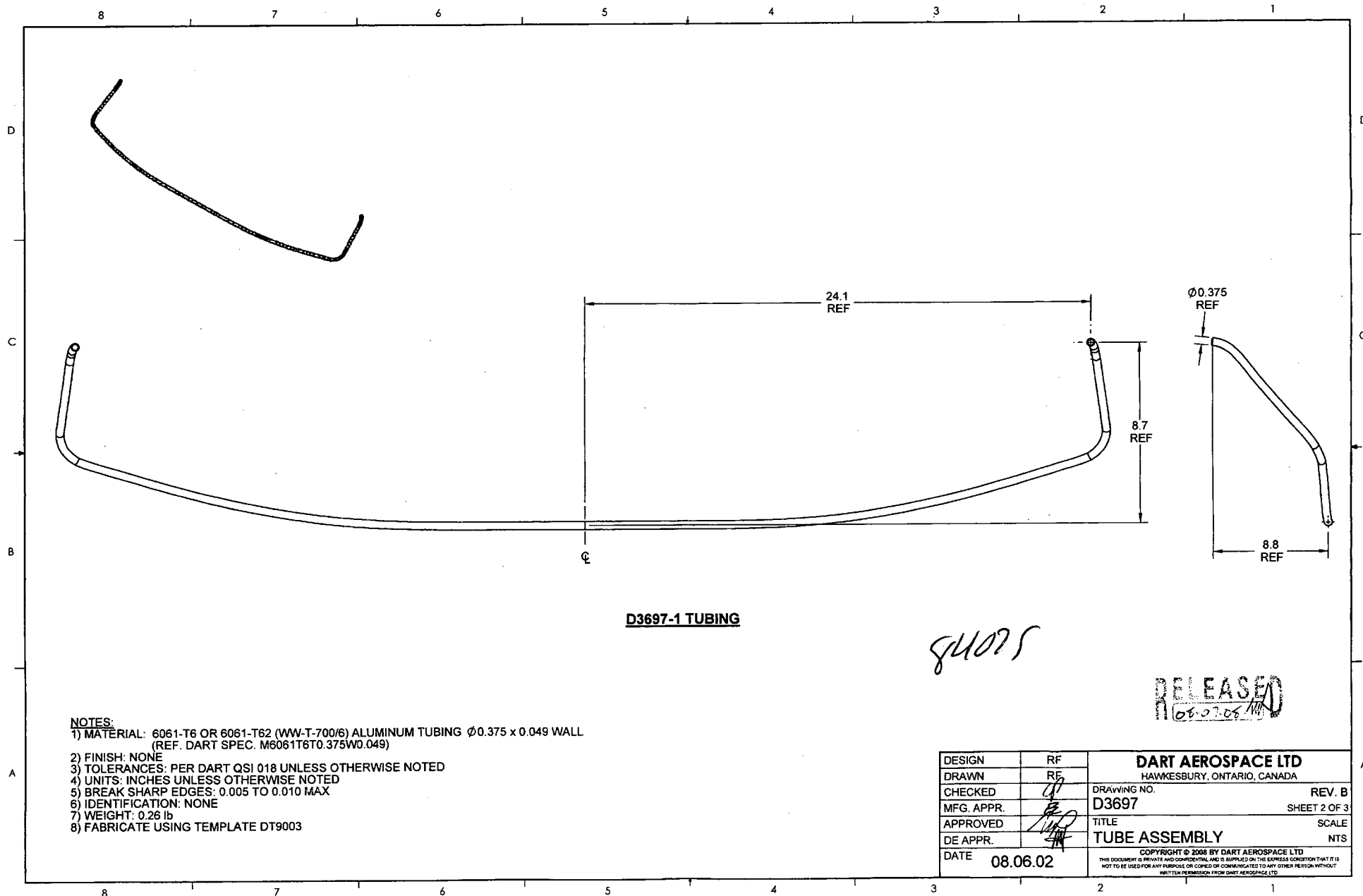
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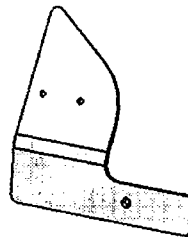
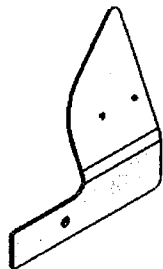
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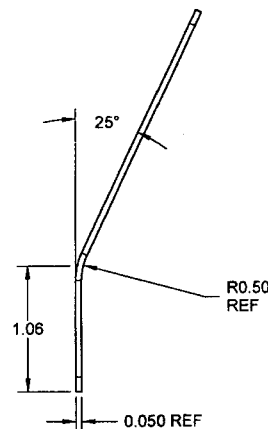
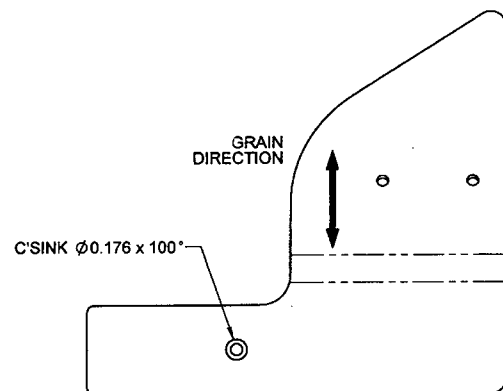
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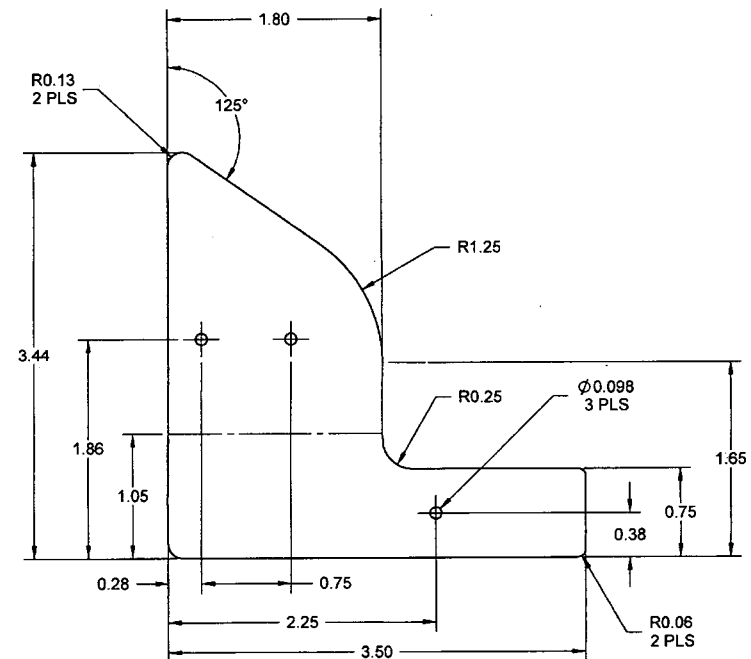


**D3697-3 SUPPORT PLATE (LH SHOWN)**

**D3697-4 SUPPORT PLATE (RH SHOWN)**



**D3697-3 SUPPORT PLATE (LH SHOWN)  
(D3697-4 SUPPORT PLATE OPPOSITE)  
(MAKE FROM D3697-3F FLAT PATTERN)**



**D3697-3F FLAT PATTERN**

**NOTES:**

- 1) MATERIAL: 6061-T6 (QQ-A-250/11) SHEET 0.050 THICK (REF. DART SPEC. M6061T6S.050)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.03 lbs

84075

RELEASED  
08-07-02

DESIGN	RF	<b>DART AEROSPACE LTD</b>	
DRAWN	RE	HAWKESBURY, ONTARIO, CANADA	
CHECKED	JP	DRAWING NO.	REV. B
MFG. APPR.	JP	D3697	SHEET 3 OF 3
APPROVED	JP	TITLE	SCALE
DE APPR.	JP	TUBE ASSEMBLY	NTS
DATE	08.06.02	<small>COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	

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